



National Weather Service

Storm Data and Unusual Weather Phenomena



April 2006

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property Crops	

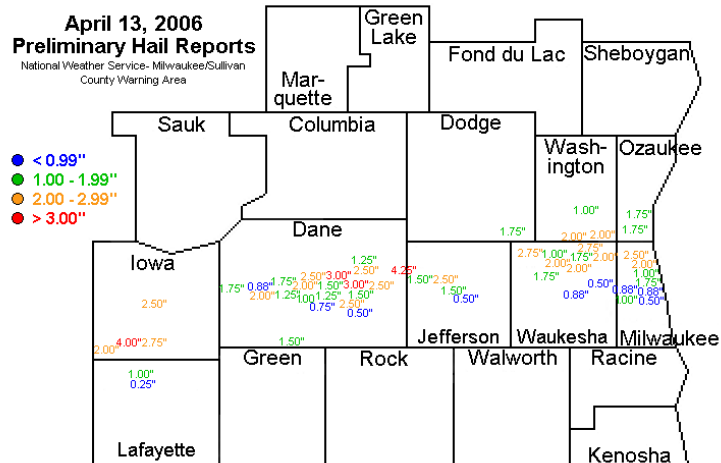
WISCONSIN, Southeast

Green County

3.4 NW New Glarus 13 1944CST 0 0 Hail(1.00)

Iowa County

Rewey 13 1944CST 0 0 4.4M Hail(2.00)



The graphic above shows reports of hail sizes in their approximate location.

Iowa County

2 E Rewey 13 1945CST 0 0 4.4M Hail(4.00)

Iowa County

Mineral Pt 13 1953CST 0 0 4.4M Hail(3.50)

Lafayette County

3 W Belmont 13 1955CST 0 0 Hail(1.00)

Lafayette County

9 N Darlington 13 1955CST 0 0 2.4M Hail(2.00)

Green County

6.5 ENE Dayton 13 1959CST 0 0 Hail(1.00)

Iowa County

Dodgeville 13 2000CST 0 0 4.4M Hail(2.50)

Iowa County

5 SW Ridgeway 13 2005CST 0 0 4.4M Hail(3.00)

Lafayette County

5 NE Belmont 13 2005CST 0 0 2.4M Hail(2.00)

Dane County

3 SE Blue Mounds 13 2015CST 0 0 Hail(1.75)

Dane County

Mt Horeb 13 2018CST 0 0 5.5M Hail(2.00)

Dane County

1.2 WNW Mt Horeb 13 2020CST 0 0 Hail(1.50)

Dane County

2 E Mt Horeb 13 2020CST 0 0 Hail(1.25)



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WISCONSIN, Southeast

Dane County 3 SW Verona	13	2027CST			0	0			Hail(0.75)
Dane County Verona	13	2028CST 2030CST			0	0			Hail(1.00)
Dane County Madison	13	2030CST 2040CST			0	0	5.5M		Hail(3.00)
Hail size ranged from 1.25 to 3.00 inches in diameter.									
Dane County 7 SW Madison	13	2030CST			0	0			Hail(1.25)
Dane County 3.3 SSW Madison	13	2030CST 2032CST			0	0	5.5M		Hail(2.00)
Dane County 2.3 W Madison	13	2032CST 2035CST			0	0	5.5M		Hail(1.75)



A typical example of the tennis to softball size hailstones that fell over parts of south-central and southeast Wisconsin during the April 13, 2006 hailstorm episode.

Dane County 1.3 WSW Shorewood Hill	13	2034CST 2039CST			0	0			Hail(1.50)
Dane County 2.7 SW Madison to 2.7 E Madison	13	2036CST 2037CST			0	0	5.5M		Hail(2.50)
Reported near the UW Campus.									
Dane County 2.3 S Oregon	13	2036CST			0	0			Hail(0.75)
Hail covered the ground 1 to 2 inches deep.									
Dane County 1 SW Madison	13	2037CST			0	0	5.5M		Hail(1.75)



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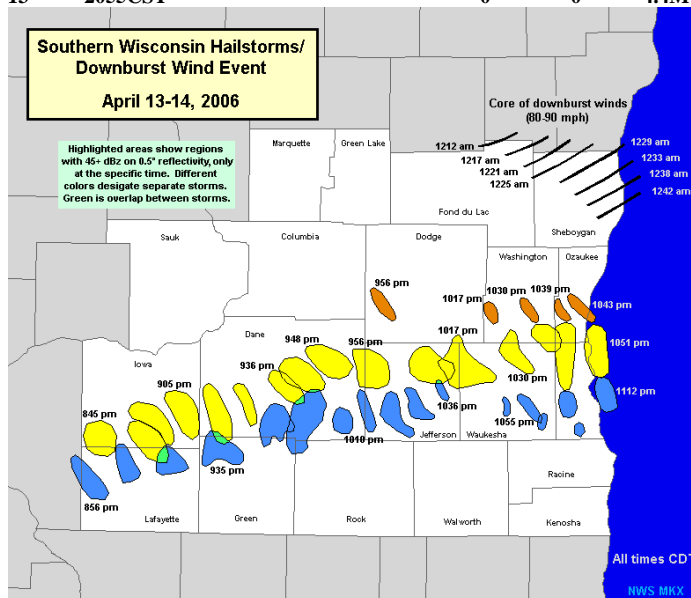


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WISCONSIN, Southeast

Dane County							
.5 NW Mc Farland	13	2038CST			0 0	5.5M	Hail(1.50)
Dane County							
1 NE Madison	13	2040CST			0 0		Hail(1.25)
Dane County							
.8 S Monona	13	2040CST 2046CST			0 0	5.5M	Hail(3.00)
Hail size ranged from 1.50 to 3.00 inches in diameter.							
Dane County							
Sun Prairie	13	2041CST			0 0		Hail(1.25)
Dane County							
.3 N Monona	13	2042CST			0 0	5.5M	Hail(2.50)
Dane County							
.5 S Mc Farland	13	2044CST			0 0		Hail(2.50)
Dane County							
Cottage Grove	13	2045CST			0 0	5.5M	Hail(3.00)
Dane County							
3.7 E Madison	13	2045CST			0 0	5.5M	Hail(3.00)
Dane County							
.1 SE Belleville	13	2048CST			0 0		Hail(1.50)
Jefferson County							
3 W Lake Mills	13	2055CST			0 0		Hail(2.50)
Jefferson County							
3 NW Lake Mills	13	2055CST			0 0	4.4M	Hail(4.25)



The graphic above shows the radar depiction of the location of each of the three main hailstorms at specific time intervals. The main core of the downburst winds per specified time intervals are also displayed for Fond du Lac and Sheboygan counties.

Jefferson County							
Johnson Creek	13	2058CST 2108CST			0 0	4.4M	Hail(2.50)
Hail sizes ranged from 1.00 to 2.50 inches in diameter.							



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<u>WISCONSIN, Southeast</u>									
Rock County									
1.5 NW Union	13	2102CST			0	0	4.4M		Hail(1.75)
Dane County									
3 SW Rockdale	13	2115CST			0	0	5.5M		Hail(2.00)
Dodge County									
Ashippun	13	2117CST			0	0	3.2M		Hail(1.75)
Washington County									
St Lawrence	13	2122CST			0	0	2.0M		Hail(1.00)
Jefferson County									
Jefferson	13	2124CST			0	0			Hail(1.50)
Waukesha County									
5.8 NW Hartland	13	2125CST			0	0	4.4M		Hail(1.75)
Waukesha County									
Merton	13	2127CST			0	0	4.4M		Hail(2.00)
Washington County									
Jackson	13	2128CST			0	0	2.0M		Hail(1.00)
Waukesha County									
.5 NE Sussex	13	2128CST 2134CST			0	0	4.4M		Hail(2.00)
Hail sized ranged from 1.00 to 2.00 inches in diameter.									
Washington County									
5 WNW Colgate	13	2130CST			0	0	2.0M		Hail(2.00)
Jefferson County									
Concord to Sullivan	13	2132CST			0	0	4.4M		Hail(2.00)
Waukesha County									
4 N Sussex	13	2132CST			0	0	4.4M		Hail(2.00)
Waukesha County									
Menomonee Falls to 1.5 NE Menomonee Falls	13	2133CST 2140CST			0	0	4.4M		Hail(2.75)
Hail sized ranged from 1.00 to 2.75 inches in diameter.									
Washington County									
1 SW Germantown	13	2137CST 2139CST			0	0	2.0M		Hail(2.00)
Hail sized ranged from 1.00 to 2.00 inches in diameter.									
Milwaukee County									
1.5 SW Brown Deer	13	2143CST			0	0	2.0M		Hail(2.00)
Ozaukee County									
.5 N Saukville to Thiensville	13	2144CST 2147CST			0	0	6.3M		Hail(1.75)
Milwaukee County									
.6 NNW Brown Deer	13	2146CST			0	0	2.0M		Hail(1.00)
Milwaukee County									
Glendale	13	2147CST			0	0	2.0M		Hail(1.00)
Waukesha County									
4 S Waukesha	13	2158CST			0	0			Hail(0.88)
Milwaukee County									
2.3 SE Milwaukee	13	2201CST			0	0			Hail(0.88)
Report provided by WISN TV 12 studios.									



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<u>WISCONSIN, Southeast</u>							
Milwaukee County							
West Allis	13	2203CST 2210CST			0 0	2.0M	Hail(1.00)
Milwaukee County							
3 SE West Allis	13	2209CST			0 0		Hail(1.00)
Milwaukee County							
5.3 SSE Milwaukee	13	2210CST Reported at 27th and Oklahoma.			0 0		Hail(1.00)
Fond Du Lac County							
1 NW Marytown to 1.9 ESE Marytown	13	2315CST 2320CST			0 0	500K	Thunderstorm Wind (EG78)
Sheboygan County							
Elkhart Lake to 5 S Sheboygan	13	2325CST 2345CST			0 0	400K	Thunderstorm Wind (EG78)

Wild weather occurred over parts of south-central and southeast Wisconsin on April 13, 2005. Wisconsin's most-costly hailstorm pummeled a large swath from around Mineral Point (Iowa Co.) to north of Milwaukee (Milwaukee Co.), while hurricane-force thunderstorm winds raked parts of Fond du Lac and Sheboygan Counties. Here's what happened: scattered supercells developed in eastern Iowa during the late afternoon hours of April 13th and pushed east-northeastward through southern Wisconsin and northern Illinois during the evening. Three main hailstorms affected southern Wisconsin. The first hailstorm left a swath of hail and hail damage from southern Iowa County (around 1945CST), through central Dane County, through northern Jefferson County, through northern Waukesha County, to northern Milwaukee County by 2151CST. This storm produced mainly 1 to 4 inch diameter hail, with a 4.25 inch hailstone reported by a State Trooper about 3 miles northwest of Lake Mills at 2055CST (larger hailstones of 4.5 to 5.7 inches in diameter have been reported in Wisconsin in previous years). A second hailstorm developed just south of the first storm and left a swath of hail and hail damage from northern Lafayette County (around 1956CST through northern Green County, through southeast Dane County., through central and southern Jefferson County, through central Waukesha County, to central Milwaukee County by 2210CST. This storm produced hailstones up to 1.5 inch in diameter. The third hailstorm developed in southern Dodge County around 2056CST, and pushed through southern Washington County into central Ozaukee County by 2139CST. This storm produced 1 to 2 inch diameter hail. Damage was widespread and extensive with the three hailstorms. Thousands of motor vehicles, residential homes, businesses, and farms sustained hail damage, but luckily, there were no reports of injuries or deaths. Vehicle damage consisted of broken windows and dented sheetmetal. Roofs, widows, and siding of buildings were damaged. Many water-birds were killed on several inland lakes. No crop losses were reported, given that the growing season had not started as of April 13th.

Based on partial insurance company information and some estimation, the April 13th hailstorms resulted in total damage amounts of about \$158.55 million. This makes the April 13th episode the most costly hailstorm to affect Wisconsin. Collectively in 9 counties, at least 23,500 vehicle claims, at least 18,650 residential claims, and at least 2,515 business/farm claims were filed with various insurance companies through June 30, 2006. These claims translated to at least \$49.8 million in vehicle damage, at least \$96.8 million in residential home damage, and at least \$11.95 million in business/farm damage (new claims were still being filed as of June 28, 2006, therefore, these numbers may ultimately increase by 5 to 10%). Insurance company numbers, as provided to the Milwaukee/Sullivan WFO (monetary value of claims and number of claims), were not broken down by county. Therefore, estimated county-by-county breakdowns were derived - based on area affected in each county by hailstones 1.0 inches or larger, county population density, and relative sizes of the 20 largest insurance companies in Wisconsin. The estimated county monetary losses are: \$66.59 million in Dane County, \$22.2 million in both Iowa and Waukesha County, \$17.44 million in Jefferson County, \$7.93 million in both Milwaukee and Washington County, \$6.34 million in Ozaukee County, \$4.73 million in Lafayette County, and \$3.17 million in Dodge County. These county numbers were then broken down and appropriated to the largest of the individual hail reports within each county (see header strips above).

Last, but not least, a line of thunderstorms then pushed southeast out of Calumet and Manitowoc Counties through northeast Fond du Lac County and northern and eastern Sheboygan County between 2312CST and 2342CST. This line produced straight-line wind gusts up to an estimated 78 knots (90 mph) which caused extensive damage. Northeast Fond du Lac County was affected at 2315-2320CST, extending from 1.0 mile northwest of Marytown to 1.9 miles east southeast of Marytown. A dozen homes to sustain roof or siding damage, and on one farm a barn and a pole-shed were destroyed. Another farm had a barn and a garage destroyed and the nearby home was moved. Monetary damage amounts were estimated to be about \$500,000 in Fond du Lac County. Sheboygan County was affected at 2325-2345CST, extending from Elkhart Lake to 5 miles south of Sheboygan. In this area, 2 barns and 5 pole sheds were destroyed, trees and powerlines were pushed onto several cars, a roof was torn off of a home in the city of Plymouth, and a roof was torn off a garage in the Town of Plymouth. In addition, a cargo trailer in the city of Sheboygan was blown 60 to 70 feet and smashed into a building that housed several businesses. About 300 customers in the city of Plymouth were without power. The Sheboygan ASOS equipment at the Sheboygan airport northwest of the city of Sheboygan recorded a gust of 58 knots (67 mph). Monetary damage amounts were estimated to be about \$400,000 in Sheboygan County. Synopically, a



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WISCONSIN, Southeast

stationary front draped itself over southern Wisconsin during the afternoon and evening of April 13th. Temperatures climbed into the mid 70s across south-central and southeast Wisconsin during the afternoon. Moderate low-level instability, cold air aloft, and strong vertical wind-shear profiles with very steep lapse-rates caused storms to fire and produce giant hail.

Dane County Middleton to Stoughton

16	1200CST 1400CST	0	0	Heavy Rain
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Dane County Verona

16	2201CST 2206CST	0	0	Hail(0.88)
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Roads and lawns were covered white.

A cluster of strong to severe thunderstorms moved through Dane County, leaving behind hail stones pea-size to nickle-size, and some heavy rains that resulted in urban and small stream flooding. Rainfall amounts around an inch occurred in the Madison area and nearby communities within a one to two hour period early Sunday afternoon. Specifically, 0.75 inch was measured in Middleton, and 1.19 inches fell in Stoughton (WWTP). This resulted in water quickly flooding low spots on roads in the area from Middleton to Madison to Stoughton. Water depths reached vehicle floorboards, and some cars stalled. There were no major vehicle accidents, but some minor fender-benders were noted.

Milwaukee County South Milwaukee

22	1618CST	0	0	Funnel Cloud
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A trained spotter reported a cold air funnel cloud at the intersection of Highway 32 and Drexel.

Racine County North Cape

22	1705CST	0	0	Hail(0.75)
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